

AMENDMENTS TO THE CLAIMS

1-6. (Canceled)

7. (Currently amended) A passive optical network system comprising:

an optical line termination; and

a plurality of optical network units that are respectively connected to an optical line termination via an optical transmission line; wherein

the optical line termination includes

an issuing unit that, upon detecting a connection with a new optical network unit while performing ranging, issues a control message requesting a PLOAM password from the new optical network unit, and acquires the PLOAM password, and

a setting unit that, based on the acquired PLOAM password, specifies a subscribed user of the new optical network unit and service details in association with the subscribed user, and performs at least one of bandwidth setting and connection setting based on the specified service details in association with the subscribed user, and

the new optical network unit includes

a notifying unit that receives, from the optical line termination, a control message requesting the PLOAM password, and issues a response message that notifies the PLOAM password, wherein the PLOAM PLAOM—password is issued by a telecommunications firm, and the PLOAM password is a password communicated by a physical layer OAM message.

8. (Previously presented) The passive optical network system according to claim 7, wherein

the PLOAM password specifies the subscribed user, and

the control messages and the response messages are sent and received using any one of a physical layer and a monitor control channel.

9. (Canceled)

10. (Currently amended) A method for connecting a plurality of optical network units included in a passive optical network system to an optical line termination via an optical transmission line, comprising:

the optical line termination detecting a connection with a new optical network unit while performing ranging;

the optical line termination issuing a control message requesting a PLOAM password from the new optical network unit, wherein the act of issuing is performed after the act of detecting;

the new optical network unit receiving from the optical line termination, a control message requesting the PLOAM ~~PLAOM~~-password ;

the new optical network unit issuing a response message including the PLOAM password;

the optical line termination specifying, based on the acquired PLOAM password, a subscribed user of the new optical network unit and service details in association with the subscribed user; and

the optical line termination performing at least one of bandwidth setting and connection setting based on the specified service details in association with the subscribed user,

wherein the PLOAM password is issued from a telecommunications firm, and the PLOAM password is a password communicated by a physical layer OAM message.

11. (Previously presented) The method according to claim 10, wherein the PLOAM password specifies the subscribed user, and the control messages and the response messages are sent and received using any one of a physical layer and a monitor control channel.

12. (Canceled)

13. (Currently amended) The passive optical network system according to claim 8, wherein

the new optical network unit further comprises

a storing unit that stores the PLOAM password; and

the optical line termination further comprises

a database configured to store the PLOAM ~~PLAOM~~ password and service details in association with the subscribed user of the new optical network unit.

14. (Previously presented) An optical network unit used for performing the method for connecting to an optical line termination according to claim 10.

15. (Currently amended) An optical line termination for a passive optical network, connecting to a plurality of optical network units, comprising:

a physical layer termination unit transmitting to a newly activated optical unit a control message requesting a PLOAM password and acquiring the PLOAM password as a PLOAM message, the PLOAM password identifying a subscribed user of the newly activated optical unit; and

a controller unit specifying a service allocated for the subscribed user of the newly activated optical unit based on the acquired PLOAM password and performing bandwidth allocation corresponding to the specified service allocated for the subscribed user of the newly activated optical unit,

wherein the PLOAM password is a password contained in a PLOAM message belonging to a physical layer and is issued by the physical layer.

16. (Currently amended) An optical network unit for a passive optical network, connecting an optical line termination via an optical fiber, comprising:

a storing unit which stores a PLOAM password, the PLOAM password identifying a subscriber; and

a physical layer termination unit connected to the optical fiber, answering to the optical line termination during a ranging process, receiving a control message requesting the PLOAM password from the optical line termination, and sending the PLOAM password in response to the control message so that the optical network unit is registered

in connection with a particular subscribed user and a service allowed to the subscribed user,

wherein the PLOAM password is a password contained in a PLOAM message and issued by a physical layer.